REMARKS

The Office Action of April 5, 2004 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Claims 1-3, 5, 7 and 12 were rejected as being anticipated by Abraham. Claims 4, 6, 8, 11, 15 and 17 were rejected as being unpatentable over the same. These rejections are respectfully traversed.

The present invention may best be appreciated in relation to the field of consumer electronics. This field is very device-cost-sensitive. Furthermore, many such devices handle media content where the availability of media content may be a function of anti-piracy measures implemented to protect such media content. Finally, connectivity is an important attribute of such devices. Cryptographic functions important to media content protection such as key exchange, digital signature and digital signature verification are computation-intensive and require substantial processing power, power that is often unavailable to a consumer electronics device. To address this situation, according to one aspect of the present invention, such functions are provided for in a link-layer access device, such as a 1394 ("Firewire") link-layer access device, for example. A consumer electronics device will often incorporate such a link-layer access device. In this manner, media content protection may be achieved while maintaining low device cost, also while impacting device architecture to a minimal degree.

Considering in turn each of independent claims 1, 7 and 12, claim 1 recites in part "a link-layer access *device*, operably coupled to the application device, the node controller, and the physical-layer device, that is configured to transform the information from the application device into data that is communicated to the physical-layer access device; wherein, the link-layer access device is further configured to provide, in response to one or more *commands* from the node controller, one or more *cryptographic items* based on one or more *parameters* from the node controller." The system of Abraham does not meet this description.

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The system of Abraham is characteristic of the prior art described in the present specification. Note that key exchange, digital signature and authentication are performed in *software* (not in hardware as the term *device* connotes) on a PC. In particular, these functions are performed by the security server program 117 of Abraham (col. 7, lines 30-40; Fig. 5). The results of these functions are communicated to the cryptographic module 31 of the cryptographic adapter hardware 29, e.g., in order for it to perform channel encryption/decryption.

The security server program 117 of Abraham cannot be equated to the link-layer access device of claim 1.

Nor can the cryptographic adapter 29 of Abraham be equated to the link-layer access device of claim 1. Although the cryptographic adapter does perform encryption/decryption, it does not "provide, in response to one or more *commands* from the node controller, one or more *cryptographic items* based on one or more *parameters* from the node controller."

Applicant notes that in the rejection of claim 1, the link-layer access device is identified first as element 61 of Abraham (RS232 interface) and later as element 25 of Abraham (workstation). Element 61 cannot be read as the link-layer access device of claim 1 because it does not perform the recited functions of the link-layer access device of claim 1. Element 25 cannot be read as the link-layer access device of claim 1 because, if it does perform the recited functions, performs them in software in like manner as the prior art, and not using a link-layer access *device* as claimed in claim 1.
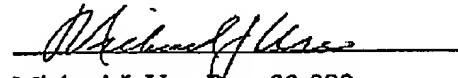
Hence claims 1 and its dependent claims are believed to patentably distinguish over the cited references.

Claim 12 recites the corresponding method as claim 1 and, with its dependent claims, is believed to be patentable for similar reasons.

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Claim 7, claiming a link-layer access *device*, and its dependent claims are believed to be patentable for similar reasons as claims 1 and 12. It is unreasonable to take the position that, because the *PC system* of Abraham may *contain* a link-layer access device, that the PC system *is* a link-layer access device. It is likewise unreasonable to take the position that any element within the *PC system* that performs a similar function as a function recited in the claim therefore satisfies that element.

Withdrawal of the rejections and allowance of claims 1-17 is respectfully requested.

Respectfully submitted,

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